

Implementation of GLOBE in India

1. Introduction/ Background

India joined GLOBE in August, 2000 when it signed the agreement with the USA. In the initial stages, about 100 schools were selected for implementation of this programme. Two NGOs namely Indian Environmental Society (IES) and Centre for Environment Education (CEE) were assigned the responsibility of coordinating this programme in 50 schools each. These two NGOs conducted training programmes for the teachers of the selected schools and by May, 2002 about 220 teachers representing these 100 schools had been trained by the GLOBE trainers.

The programme got a boost when an International GLOBE training workshop was organized at New Delhi, India during January, 2002 by the IES in collaboration with the GLOBE Secretariat and Ministry of Environment and Forests, Govt. of India. This was followed by integrating the GLOBE programme into the **Environment Education in School System (EESS)** project aimed at strengthening infusion of environment concepts into the school curriculum. The EESS project which covered eight States initially was implemented on pilot basis in 100 schools each covering classes VI to VIII. The GLOBE programme was integrated into this project as Hands-on Environmental Learning programme enabling it to become part of the school curriculum. The IES which was appointed as Executing Agency for the GLOBE programme under EESS project organized 16 training workshops in these eight States namely Andhra Pradesh, Assam, Maharashtra, Goa, Punjab, Uttaranchal, Orissa and J&K. About 700 teachers representing 700 schools were trained in various GLOBE protocols during these training workshops. Some basic instruments like pH meter, TDS tester, Densimeter, Clinometer, Measuring Tape, Sieve, Secchi Disk etc. were also supplied to each of these schools to enable them to conduct GLOBE experiments as part of the school curriculum.

2. Current Activities

Seeing the success of this initiative, the GLOBE programme has been further extended to eight more States thereby bringing 16 out of the total 28 States of the country under the coverage of this programme. These States are Chhattisgarh, Himachal Pradesh, Karnataka, Kerala, Tamil Nadu, Tripura, Sikkim and West Bengal. In these States also, the GLOBE programme has been integrated into the EESS project and is being implemented in 100 schools in each State. The IES has organized 16 teacher training workshops – two in each State – to train about 750 teachers from these schools in various GLOBE protocols. In the meanwhile, the implementation of GLOBE programme was also followed up with the teachers trained earlier. So far, more than 400 schools have started collecting data out of which more than 200 schools have started reporting

data to the GLOBE. During the current year, it is proposed to consolidate the GLOBE activities in more than 1500 schools in which the teachers have been trained. It would require action on the following points :

- (i) Personal follow up with each GLOBE teacher;
- (ii) Provision of GPS receiver for determination of coordinates like Latitude, Longitude, Elevation etc;
- (iii) Creation of GLOBE IDs for these schools;
- (iv) Provision of some basic instruments to the schools which have not been provided these so far;
- (v) Initiation of action in the GLOBE schools for collection of data;
- (vi) Providing access to the internet to those schools which do not have this facility at the moment;
- (vii) Follow up with the GLOBE teachers to ensure that GLOBE data is regularly reported.

3. Special Event

A workshop was organized during December, 2003 for the GLOBE trainers to share their experiences gained during the teacher training workshops and to sort out problems, if any, faced by them. The workshop was attended by about 30 trainers from India. Besides updating the trainers with the latest changes in various protocols, standard training procedure (STP) was also prepared for the trainers as well as the coordinators for each workshop.

A special workshop was also organized for 100 GLOBE teachers from Maharashtra to help them in submitting the data to the GLOBE archives. This workshop, which was arranged in a computer institute was conducted by the Country Coordinator with the help of a couple of GLOBE trainers, provided the GLOBE teachers hands-on experience of working on the computers and submitting the data through internet. The workshop was a great success in helping the teachers in overcoming the initial hesitation of working on the computers.

4. School to School Collaborations

An interactive GLOBE website for India is being developed. The website, which will have a complete data base of GLOBE schools in India, would help the schools in developing collaborative programmes. The schools collaboration programmes will be developed to provide opportunities to the GLOBE schools to share information / data among themselves within India and outside.

5. Future Activities

Till now about 1550 teachers representing about 1500 schools spread over various States of India have been trained in various GLOBE protocols. Out of these, only 400 (approximately) have started collecting the data and only about 200 are regularly reporting the data. There are several reasons for such low percentage of the GLOBE schools actually getting involved into this programme. The main reasons are the lack of the basic instruments like GPS receivers, thermometers etc. and the hesitation to initially start the programme in the school. It is, therefore, proposed to consolidate the programme in these schools during next couple of years by regular follow up. Strong linkages are also proposed to be provided between the school curriculum and this programme.

It is proposed to organize special workshops for the Heads of these GLOBE schools to acquaint them with the merits of this programme and its relevance in educating the children. Special programmes would also be organized for addressing the teachers' difficulties. The activities listed under the head '**Current Activities**' would also help a great deal in making this programme successful.